

REMARKS

Claims 1-3, 5-8, 11-12, 14 and 16-23, 25-26, 28-32 and 34-40 were examined by the Office, and in the Office Action of February 26, 2009 all claims are rejected. With this response claims 1, 5, 12, 16, 23, 32 and 37-38 are amended, claims 39-40 are cancelled. The specification is amended to correct a typographical error. All amendments and new claims are fully supported by the specification as originally filed. Applicant respectfully requests withdrawal of the rejections in view of the following discussion.

This response is submitted along with a Request for Continued Examination (RCE).

Claim Rejections Under § 112

In section 4, on page 3 of the Office Action, claims 1, 12, 23, 32 and 37-38 are rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the enablement requirement. The Office asserts that the limitation "at the start of a line when a prediction value is not available for the pixel, encoding a quantized pixel value to the bit string," does not have enablement in the original specification. Applicant respectfully disagrees.

Paragraph [0032] of Application Publ. No. 2004/0202375 for the present application states "if there is no prediction value available...the original pixel is quantized from N bits to M bits and is transferred to the PCM codec." Therefore, it is clearly stated in paragraph [0032] that a first pixel is quantized, thereby forming a quantized pixel as in claim 1, then the quantized pixel is transferred to a codec, thus performing encoding a quantized pixel to the bit string as recited in claim 1.

The Office further asserts that the limitation "difference is used for selecting method for encoding among more than two encoding methods to encoded said pixel into the bit string" does not have enablement in the original specification. Applicant respectfully disagrees.

Paragraph [0093] of Application Publ. No. 2004/0202375 for the present application states "if the absolute value of the change between the pixel in question and the prediction value is sufficiently small (< 128), the DPCM codec will be used in the

encoding.” According to the present application, change means difference. See paragraph [0038]: “If the absolute value of the change between the pixel in question and the prediction value is high (> 127), the PCM coded will be used in the encoding.” See also paragraphs [0042]-[0058]. Therefore, the application specification states that the difference is used for selecting a method for encoding among more than two encoding methods, i.e. DPCM1, DPCM2, DPCM3, PCM, to encode the pixel into the bit string. See also Figure 4. The differential pulse code modulation encoding method or the pulse code modulation method is selected based on the prediction value. It is clearly shown that there can be more than two encoding methods among which the selection is made (DPCM1, DPCM2, DPCM3, PCM). In fact, in the examples given, there are the named four methods disclosed.

The Office further asserts that the limitation “in which method the bit string has a fixed-length smaller than the length of the originally digitized pixel encoded pixels in the image” does not have enablement in the original specification. Applicant respectfully disagrees.

Paragraph [0031] of Application Publ. No. 2004/0202375 for the present application states that “an example of 10-bit colour image is processed, which is compressed to 8 bits,” and that “the original pixel (Xorig) consists of 10 bits and is encoded to a pixel of eight bits (Xenco). See also Figures 1-3.

Therefore, applicant respectfully submits for at least the reasons discussed above, claim 1 is enabled by the application disclosure. The same comments also apply with respect to claims 12, 23, 32 and 37-38.

In section 6, on page 4 of the Office Action, claims 1, 12, 23, 32, 37 and 38 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1, 12, 23, 32 and 38 are amended to recite “a value.” Therefore, applicant respectfully requests withdrawal of the rejection.

In section 7, on page 4 of the Office Action, claims 5 and 16 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 5 and 16 are amended

to depend from claims 1 and 12 respectively. Therefore, applicant respectfully requests withdrawal of the rejection.

In section 8, on page 5 of the Office Action, claims 12, 23, 32 and 37-38 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 12, 23, 32 and 37-38 are amended in a manner that is believed to render the claims definite. Therefore, applicant respectfully requests withdrawal of the rejection.

Claim Rejections Under § 101

In section 8, on page 4 of the Office Action, claims 1-3, 5-8 and 11 are rejected under 35 U.S.C. § 101 as being nonstatutory. Applicant respectfully submits that claim 1 is statutory, because claim 1 at least stratifies the transformation requirement of the machine or transformation test. Claim 1 recites determining a difference between a pixel value and a prediction value, and using the difference to select a method for encoding the pixel into the bit string. Furthermore, claim 1 recites encoding a code word indicating the selected method. These operations relate to processing data of the original pixel value to obtain an encoded representation of the pixel. The pixel values are transformed to a different form for example in order to communicate data inside the device and between devices and to show the pixel data. The chain of pixels is in fact changing shape in the transformation as described in the encoding examples.

Therefore, claim 1 satisfies the transformation requirement, because claim 1 transforms a particular article to a different state or thing by encoding the code word indicating the selected encoding method. In addition, the method relates to an image processing system which is a specific, physical device or a group of devices. Therefore, for at least these reasons, applicant respectfully requests withdrawal of the rejection to claim 1.

Claim Rejections Under § 102

In section 12, on page 7 of the Office Action, claim 37 is rejected under 35 U.S.C. § 102(b) as anticipated by Weinberger (U.S. Patent No. 5,680,129). In section 15, on page 19 of the Office Action, claims 39 and 40 are indicated to contain allowable subject matter. Claim 37 is amended to include limitations from claims 39 and 40. Therefore,

applicant respectfully submits that claim 37 is not disclosed or suggested by Weinberger.

Claim Rejections Under § 103

In section 14, on page 9 of the Office Action, claims 1-3, 5-8, 12, 14, 16-23, 25-26, 28-32 and 34-38 are rejected under 35 U.S.C. § 103(a) as unpatentable over Weinberger in view of Kato (U.S. Patent No. 5,392,037). In section 15, on page 19 of the Office Action, claims 39 and 40 are indicated to contain allowable subject matter. Independent claims 1, 12, 23, 32 and 38 are amended to include limitations from claims 39 and 40. Therefore, applicant respectfully submits that these independent claims are not disclosed or suggested by the cited references.

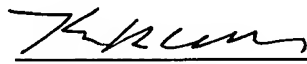
The dependent claims rejected above, are not disclosed or suggested by the cited references at least in view of their dependencies.

Conclusion

For at least the foregoing reasons, the present application is believed to be in condition for allowance, and such action is earnestly solicited. The undersigned hereby authorizes the Commissioner to charge Deposit Account No. 23-0442 for any fee deficiency required to submit this response.

Respectfully submitted,

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